



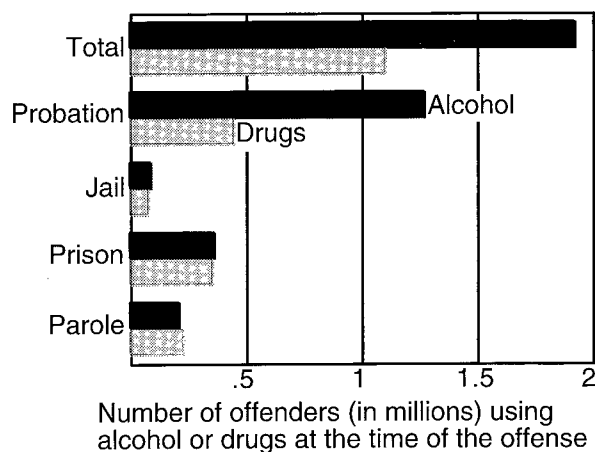
Bureau of Justice Statistics

Alcohol and Crime

An Analysis of National Data on the Prevalence of Alcohol Involvement in Crime

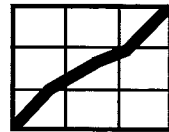
On an average day in 1996, corrections authorities supervised an estimated 5.3 million convicted offenders. Nearly 2 million (about 36%) had been drinking alcohol when they committed their conviction offense.

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Alcohol and Crime

An Analysis of National Data on the Prevalence of Alcohol Involvement in Crime

Prepared for the Assistant Attorney General's
National Symposium on Alcohol Abuse and Crime

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Washington, D.C.

By Lawrence A. Greenfeld
Statistician
Bureau of Justice Statistics

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U.S. Department of Justice
Bureau of Justice Statistics

Jan M. Chaiken, Ph.D.
Director

This report was written by Lawrence A. Greenfeld, deputy director, Bureau of Justice Statistics. David Levin provided substantial assistance in the preparation and analysis of FARS data from the National Highway Traffic Safety Administration; he also verified the report's findings. Laura Maruschak provided assistance in the analysis of the 1996 Survey of Inmates in Local Jails. Cheryl Ringel verified the findings from the National Crime Victimization Survey. Tom Hester, Priscilla Middleton, Rhonda Keith, and Jayne Robinson designed and produced the report. Maureen Henneberg and Yvonne Boston reviewed the report. Marilyn Marbrook, assisted by Ms. Boston, prepared the report for printing.

Data analyzed for this report can be obtained from the National Archive of Criminal Justice Data 1-800-999-0690. Related reports, spreadsheets, graphs, and information, as well as the archive itself, can be accessed at the BJS Internet site:

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Foreword

The extensive and far-reaching impacts of alcohol abuse on crime and public safety are only now achieving widespread public policy attention. This report was prepared to provide statistical information as background for the Assistant Attorney General's 1998 National Symposium on Alcohol Abuse and Crime, which will address many of these policy issues and discuss approaches that may help alleviate these problems.

Based on this compilation and new analysis of data on alcohol and crime, we know that nearly 4 in 10 violent victimizations involve use of alcohol, about 4 in 10 fatal motor vehicle accidents are alcohol-involved; and about 4 in 10 offenders, regardless of whether they are on probation, in local jail, or in State prison, self-report that they were using alcohol at the time of the offense.

There are, however, a number of positive indicators that alcohol-related crime is generally decreasing and that most of those in need of treatment are receiving it. Violence between current and former spouses, boyfriends, and girlfriends is especially likely to involve alcohol abuse, and all forms of violence against intimates, including homicide, have been declining in recent years. In addition, rates of arrest for DUI have declined by 24%

since 1990. During the last 10 years, the number of highway fatalities attributable to alcohol-related accidents has dropped by about 7,000 annually, a 29% decrease.

This report uses a wide variety of sources, including statistical series maintained by the Bureau of Justice Statistics (BJS), the Federal Bureau of Investigation, the National Highway Traffic Safety Administration, and the Bureau of Transportation Statistics. We are grateful for the cooperation of these agencies and also want to thank the many respondents to our surveys throughout the country.

We anticipate that more on the issue of alcohol and crime will be available in the near future as new data collections by BJS, including the 1997 Survey of Inmates of State and Federal Correctional Facilities, are analyzed. BJS has incorporated new questions into its surveys which will enable a more in-depth understanding of the alcohol use and abuse backgrounds of offenders and the nature of the treatment they receive while incarcerated.

Jan M. Chaiken, Ph.D.
Director, Bureau of Justice Statistics

Laurie Robinson
Assistant Attorney General
Office of Justice Programs

Highlights

This report provides the most comprehensive analysis of statistical data on alcohol and crime published to date by BJS.

Sources of information include the BJS National Crime Victimization Survey (NCVS), BJS self-report surveys of correctional populations, and the periodic BJS censuses of Federal, State, and local corrections facilities. In addition, arrest data from the FBI's Uniform Crime Reporting Program and the most recent data available from the FBI's National Incident-Based Reporting Program are used to supplement national survey data.

Finally, the report includes new analyses from the National Highway Traffic Safety Administration's Fatal Accident Reporting System (FARS), a database providing detail on more than 2.1 million fatal motor vehicle accidents that occurred over the last two decades. The study provides the first-ever estimates of the level of intoxication among drinking offenders at the time of the commission of the offense for which they had been convicted.

The role of alcohol in crime victimization

► About 3 million violent crimes occur each year in which victims perceive the offender to have been drinking at the time of the offense. Among those victims who provided information about the offender's use of alcohol, about 35% of the victimizations involved

an offender who had been drinking. About two-thirds of the alcohol-involved crimes were characterized as simple assaults.

► Two-thirds of victims who suffered violence by an intimate (a current or former spouse, boyfriend, or girlfriend) reported that alcohol had been a factor. Among spouse victims, 3 out of 4 incidents were reported to have involved an offender who had been drinking. By contrast, an estimated 31% of stranger victimizations where the victim could determine the absence or presence of alcohol were perceived to be alcohol-related.

► For about 1 in 5 violent victimizations involving perceived alcohol use by the offender, victims also reported they believed the offender to have been using drugs as well.

► Data for 1995 from the National Incident-Based Reporting System (NIBRS) of the FBI indicate that about half the incidents described by the investigating officer as alcohol-related were between offenders and victims who were intimates.

► NIBRS data show that about 7 out of 10 alcohol-involved incidents of violence occurred in a residence; the hour beginning at 11 p.m. was the most frequent time of occurrence; and about 2 in 10 incidents involved the use of a weapon other than hands, fists, or feet.

DUI/DWI: Arrests and fatal accidents

► In 1996, local law enforcement agencies nationwide made an estimated 1,467,300 arrests for driving under the influence (DUI). Arrests for DUI peaked in 1983 when there were 1.9 million arrests. Compared to 1983, the per capita rate of arrest for DUI in 1996 was 34% lower.

► Declines in DUI arrest rates have occurred for every age group. Of particular note is the decrease in DUI arrest rates for those under the age of 21 compared to their rates of DUI arrest in the early 1980's when States had not adopted a uniform drinking age. In 1980 persons between 16 and 20 years old accounted for 10% of licensed drivers but 15% of DUI arrestees. In 1996, this age group accounted for 7% of drivers and 8% of DUI arrestees.

► In 1996 there were 17,126 alcohol-related traffic fatalities accounting for 40.9% of all traffic fatalities during the year. This is a 29% reduction from the more than 24,000 fatalities recorded 10 years earlier when alcohol was involved in 52% of the fatalities.

► An estimated 32% of fatal accidents involved an intoxicated driver or pedestrian (the majority are drivers, however) with a blood alcohol concentration, or BAC, of at least 0.10 grams of alcohol per deciliter of blood, the most commonly used definition of intoxication.

► Over the last decade rates of intoxication in fatal accidents have declined across every age group. In 1986, there was about 1 driver involved in a

fatal accident in which he/she was intoxicated for every 10,500 drivers; in 1996, the rate translates into about 1 intoxicated driver in a fatal accident for every 17,200 licensed drivers.

► Among drinking drivers whose BAC at the time of the accident was known, 84% had a BAC of at least 0.08 g/dl and 78% had a BAC of 0.10 g/dl or higher.

► The average BAC among drinking drivers in fatal accidents was 0.16 g/dl. There was a strong relationship between average BAC among drinking drivers in fatal accidents and prior driving record — consistently, those with prior suspensions, invalid licenses, and prior driving while intoxicated (DWI) convictions reflected the highest BAC's at the time of the crash. Among drivers in fatal accidents who had at least two prior DWI convictions, the average BAC was 0.21 g/dl, the highest of any group.

Use of alcohol by convicted offenders

► Among the 5.3 million convicted offenders under the jurisdiction of corrections agencies in 1996, nearly 2 million, or about 36%, were estimated to have been drinking at the time of the offense. The vast majority, about 1.5 million, of these alcohol-involved offenders were sentenced to supervision in the community: 1.3 million on probation and more than 200,000 on parole.

► There was some variation in the percentage of offenders who had been using alcohol at the time of the offense across different correctional statuses:

40% of both jail inmates and probationers, 32% of State prisoners, and 29% of parolees.

► Alcohol use at the time of the offense was commonly found among those convicted of public-order crimes, a type of offense most highly represented among those on probation and in jail. Among violent offenders, 41% of probationers, 41% of those in local jails, 38% of those in State prisons, and 20% of those in Federal prisons were estimated to have been drinking when they committed the crime.

► Based upon self-reports of what offenders were drinking and for how

long, it is estimated that the average BAC level at the time of the crime was:

	Proba- tioners	Jail inmates	State prisoners
All offenders	.16	.19	.27
Violent	.18	.20	.28
Property	.24	.22	.30
Drugs	.14	.15	.19
Public-order*	.14	.19	.23

*Includes offenses like driving while intoxicated, weapons offenses, and commercial vice.

► An estimated 62% of probationers drinking at the time of the offense and — among daily drinkers — 65% of convicted jail inmates and less than 50% of State prisoners reported ever participating in an alcohol treatment program.

Alcohol and health issues

- An analysis of alcohol dependence among trauma center patients found that the prevalence of alcoholism was substantially higher among vehicular crash victims and other trauma patients than among the equivalent general population group. More than half of trauma patients with a positive

BAC at the time of the trauma were diagnosed as alcoholics, and nearly 1 in 7 patients who were not drinking at the time of the trauma were diagnosed as alcohol-dependent.

Source: "Alcoholism at the Time of Injury Among Trauma Center Patients: Vehicular Crash Victims Compared with Other Patients," *Accident Analysis and Prevention*, Vol. 29, No. 6, 1997.

- Death rates from alcohol-induced causes have declined especially sharply among black males and females, but the rates among blacks are twice those among whites.

Year	Rates per 100,000 persons, adjusted for age				
	All groups	Whites		Blacks	
		Males	Females	Males	Females
1980	8.4	10.8	3.5	32.4	10.6
1985	7.0	9.2	2.8	27.7	8.0
1990	7.2	9.9	2.8	26.6	7.7
1992	6.8	9.9	2.6	22.3	6.3
1993	6.7	9.7	2.7	21.3	5.5
1994	6.8	9.9	2.7	20.4	5.6
Percent change 1980-94	-19.0%	-8.3%	-22.9%	-37.0%	-47.2%

Source: National Center for Health Statistics, *Monthly Vital Statistics Reports*.

Sources of data on alcohol and crime

National Crime Victimization Survey

The National Crime Victimization Survey (NCVS) is one of two statistical series maintained by the Department of Justice to learn about the extent to which crime is occurring. The NCVS, which gathers data on criminal victimization from a national sample of household respondents, provides annual estimates of crimes experienced by the public without regard to whether a law enforcement agency was called about the crime. Initiated in 1972, the NCVS was designed to complement what is known about crimes reported to local law enforcement agencies under the FBI's annual compilation known as the Uniform Crime Reporting Program (UCR).

The NCVS gathers information about crime and its consequences from a nationally representative sample of U.S. residents age 12 or older about any crimes they may have experienced. For personal contact crimes the survey determines who the perpetrator was.

In the latter half of the 1980's, the Bureau of Justice Statistics (BJS), together with the Committee on Law and Justice of the American Statistical Association, sought to improve the NCVS components to enhance the measurement of crimes including rape, sexual assault, and intimate and family violence. The new questions and revised procedures were phased in from January 1992 through June 1993 in half the sampled households. Since July 1993 the redesigned methods

have been used for the entire national sample. The NCVS asks victims of violence directly about their perceptions of alcohol and drug use by the offender.

Uniform Crime Reporting Program

The Uniform Crime Reporting Program (UCR) of the FBI provides another opportunity to examine the issue of alcohol-involved arrests. The summary-based component of the UCR, launched 70 years ago, gathers aggregate data on eight categories of crime from law enforcement agencies nationwide. While the summary UCR does provide detailed information on those arrested for driving while under the influence, it does not provide any information necessary to identify violent crimes or arrests involving alcohol. Such data are available, however, from the incident-based component of the UCR, the National Incident-Based Reporting Program (NIBRS).

National Incident-Based Reporting Program

NIBRS represents the next generation of crime data from law enforcement agencies. Rather than being restricted to a group of 8 Index crimes that the summary-based program uses, NIBRS obtains information on 57 types of crimes. The information collected on each violent crime incident includes victim-offender demographics, victim-offender relationship, time and place of occurrence, weapon use, and victim injuries. An important contribution of NIBRS is that investigating officers are asked to record their perception of whether alcohol was a factor in the

incident. As of the end of 1997, jurisdictions certified by the FBI as capable of reporting incident-based data in the required format account for just over 7% of the U.S. population (about 19 million Americans) and just over 6% of all Index crimes (murders, rapes, robberies, aggravated assaults, burglaries, larcenies, and motor vehicle thefts).

In those States with certified NIBRS systems, about 50% of the population is now covered by NIBRS reporting to the FBI. BJS is currently funding preliminary studies of NIBRS data and their utility for improving our knowledge of violence with special regard for such concerns as intimate violence, family violence, and domestic violence and the role alcohol may play in these kinds of police-reported incidents.

Surveys of probationers, jail and prison inmates

BJS also conducts national surveys of persons under probation supervision and those confined in local jails and State and Federal prisons. These nationally representative surveys are the principal source of information on those serving time following a conviction: their backgrounds, their prior criminal histories, and the circumstances surrounding the offense for which they had been incarcerated.

Both jail and prison surveys obtain from violent offenders details about the offender's relationship to the victim and how the crime was carried out. All three surveys incorporate detailed questions regarding alcohol

use and abuse both before the crime and at the time the crime was committed. In addition, a number of questions are devoted to treatment and the types of treatments received.

Censuses of prisons and jails

BJS carries out facility-level data collection among each of the 1,500 State and Federal prisons and the 3,300 local jails. These statistical series gather detailed information on the operations of each facility, including capacity, staffing, programs, court orders, and special functions or services provided to inmates. Facilities are queried about their treatment programs and the extent of inmate participation.

Fatal Accident Reporting System

Since 1975, the National Highway Traffic Safety Administration of the U.S. Department of Transportation has maintained the annual Fatal Accident Reporting System (FARS) which obtains accident-level data on each motor vehicle crash involving a fatality. FARS uses State agencies under contract to complete a standardized form on each fatal accident which covers weather and road conditions, vehicle type, number of passengers and fatalities, the manner of the crash, whether there was a drinking or drug-using driver involved, and specific measurement of blood alcohol concentration or BAC (grams of alcohol per deciliter of blood).

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Measuring the extent to which alcohol is involved in crime

Estimates from the National Crime Victimization Survey indicate that victims of about 3 million violent crimes each year, or about a quarter of all violent crimes, perceived the offenders to have been drinking. Among victims of violence who were certain that they could tell whether or not an offender had been drinking, about 35% of the violent victimizations were believed to have involved an assailant who had been drinking.

Household surveys reveal that alcohol use is common among most U.S. residents. An estimated 8 in 10 persons aged 12 or older has used alcohol at some time in their lives and half describe themselves as current users. Prevalence of use, however, is age-sensitive since all States have, since 1983, revised the legal age to a uniform 21 years old.

Age	Alcohol use ¹	
	Ever	Current
12 or older	82%	52%
12-17	41	21
18-25	84	61
26-34	90	63
35 or older	87	53

About 1 in 18 persons age 18 or older describe themselves as consuming two or more drinks per day² but

¹U.S. Substance Abuse and Mental Health Services Administration, *National Household Survey on Drug Abuse*, annual. Data obtained from *Statistical Abstract of the United States 1997*, table 220, p. 144.

²National Center for Health Statistics, *Health Promotion and Disease Prevention: United States, 1990, Vital and Health Statistics*, Series 10, No. 185.

national estimates of annual per capita consumption of alcoholic beverages have dropped about 10% since 1990. Even with this decline, aggregate consumption translates into about one drink per day for every resident.

	Per capita annual consumption of alcohol ³	
	1990	1995
Total (gallons)	40.0 gal.	35.9 gal.
Beer	34.9	31.6
Wine	2.9	2.6
Spirits	2.2	1.8

In 1995 the Substance Abuse and Mental Health Services Administration conducted a survey of all known facilities providing alcoholism treatment in the United States. The survey revealed that there were nearly 800,000 clients receiving services who were considered to have an alcohol problem. Almost certainly the number of clients participating in such programs would represent a substantial underestimate of the size of the total population for whom alcohol abuse is a significant problem.

A variety of ways exist to estimate the extent to which alcohol may be a factor in crime. A significant caveat is that most alcohol consumption does not result in crime: the vast majority of those who consume alcohol do not engage in criminal behavior. However, since nonoffending behavior is not typically measured, there is little statistical information upon which to base any estimate of the likelihood of

³U.S. Department of Agriculture, Economic Research Service, *Food Consumption, Prices, and Expenditures, 1997: Annual Data, 1970-95*.

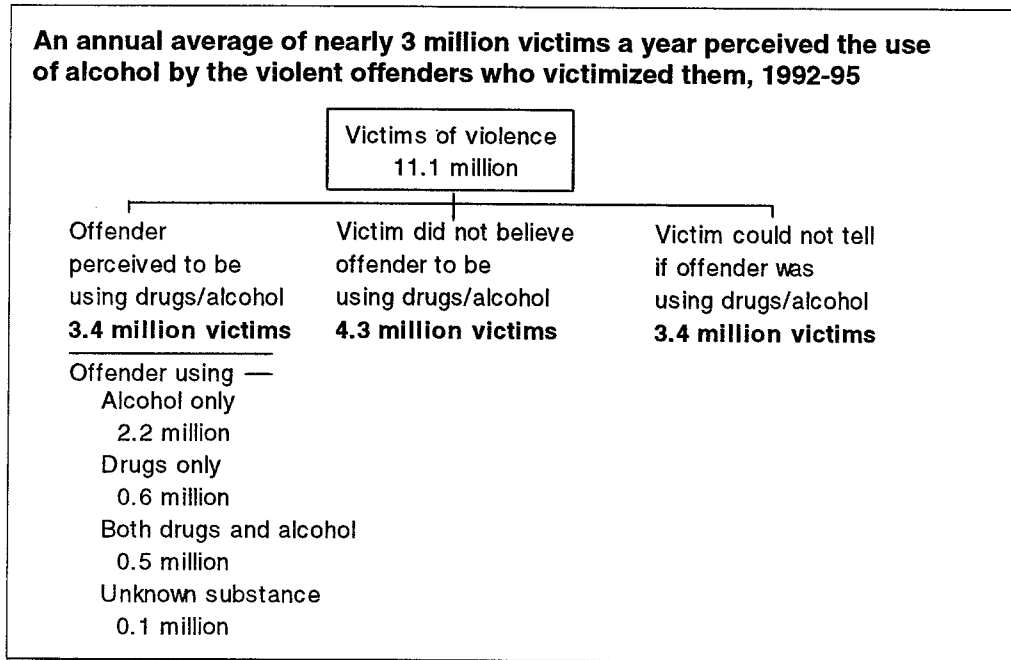


Figure 1

committing a criminal act when drinking or following a period of drinking.

In 1993 the National Research Council's Panel on the Understanding and Control of Violent Behavior (Albert J. Reiss and Jeffrey A. Roth, editors, *Understanding and Preventing Violence*, Washington, D.C.: National Academy Press, 1993, pages 184-5) concluded, after an exhaustive review of the literature, that existing prevalence research was not "sufficient to show that alcohol use or intoxication increases the general risk of violence." However, the panel did observe that many studies had documented offender use of alcohol preceding the offense and that offender populations usually were found to contain "heavy" or "problem" drinkers.

Victims' perceptions of alcohol use by offenders

On average each year from 1992 to 1995, there were an estimated 11.1 million violent victimizations of residents age 12 or older (figure 1). Victims of violence were asked to describe whether they perceived the offender to have been drinking or using drugs.

- Victims indicate that for about 7.7 million violent victimizations, about 70% of all violent victimizations, they are able to distinguish whether or not alcohol or drug use by the offender was a factor.
- In about 30% of violent victimizations, the victim does not know whether the offender had been using drugs or alcohol.

Among the 11.1 million victims of violence each year, 1 in 4 were certain that the offender had been drinking before committing the crime.

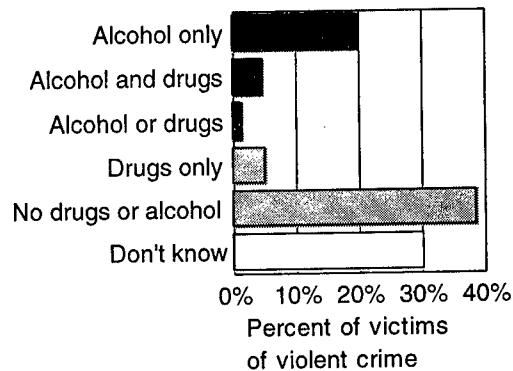


Figure 2

- For those violent victimizations in which the victims indicated that they were able to report whether alcohol or drugs had been used by the offender, about 56% reported no use of either substance and 37% believed the offender was using alcohol or alcohol in combination with drugs (figure 3).

- Among victims who were able to distinguish alcohol or drug use by the offender, the victim-offender relationship was an important factor in whether the victim reported alcohol involvement:

- Based on victim perceptions, about 2.7 million violent crimes occur each year in which victims are certain that the offender had been drinking. For about 1 in 5 of these violent victimizations involving alcohol use by the offender, victims believed the offender was also using drugs at the time of the offense (figure 2).

	Percent of violent victimizations with offender using alcohol
All victims	37%
Intimate*	67
Nonmarital relatives	50
Acquaintances	38
Strangers	31

*Includes current or former spouse, boyfriend, and girlfriend.

Among victims of violence who were able to describe the offender's use of drugs or alcohol, about two-thirds in an intimate relationship with the offender reported the offender's drinking at the time of the crime.

Victim-offender relationship	Total	Offender using			
		Alcohol	Drugs	Drugs or alcohol	Neither drugs nor alcohol
All victims of violence	100%	28%	7%	9%	56%
Intimate*	100	55	9	12	25
Nonmarital relative	100	38	14	12	36
Acquaintance	100	28	9	10	52
Stranger	100	24	6	7	63

*Includes current or former spouse, boyfriend, and girlfriend.

Figure 3

- Among spouse victims of violence who were able to describe substance use by the offender, 3 out of 4 incidents were reported to have involved an offender who had been drinking.

	Percent of spouse violence victimizations involving substance use
Alcohol only	65%
Drugs only	5
Both alcohol and drugs	11
Either alcohol or drugs	<1
Neither alcohol nor drugs	19

- Victim perceptions of the offender's use of drugs or alcohol also varies by type of crime (figure 4).

Based on victim reports, on average each year about 183,000 rapes and sexual assaults involve alcohol use by the offender, as do just over 197,000 robberies, about 661,000 aggravated assaults, and nearly 1.7 million simple assaults.

Combined use of drugs and alcohol accounted for 18% of the alcohol-involved rapes and sexual assaults, 36% of the alcohol-involved robberies, 24% of the aggravated assaults in which the offender was drinking, and 15% of the simple assaults involving a drinking offender.

Drinking offenders committed over a third of the rapes or sexual assaults of persons older than 12 and over a quarter of the aggravated and simple assaults, according to victims' perceptions.

Average annual number of violent victimizations 11.1 million									
		Rape/sexual assault 497,000 incidents		Robbery 1,287,900 incidents		Aggravated assault 2,427,900 incidents		Simple assault 6,882,400 incidents	
Offender was using -									
Alcohol	30%	Alcohol	10%	Alcohol	21%	Alcohol	21%		
Drugs	4%	Drugs	9%	Drugs	6%	Drugs	4%		
Drugs and alcohol	7%	Drugs and alcohol	5%	Drugs and alcohol	7%	Drugs and alcohol	4%		
Drugs or alcohol	2%	Drugs or alcohol	1%	Drugs or alcohol	1%	Drugs or alcohol	1%		
Neither	24%	Neither	59%	Neither	42%	Neither	35%		
Unknown	34%	Unknown	16%	Unknown	23%	Unknown	36%		

Figure 4

Nearly two-thirds of the victims of violence who perceived that the offender committed the offense while using only alcohol were victims of simple assault.

Victim-offender relationship	Offender using			
	Alcohol	Drugs	Drugs or alcohol	Neither drugs nor alcohol
Total	100%	100%	100%	100%
Rape/sexual assault	7	4	6	3
Robbery	6	19	13	18
Aggravated assault	23	25	29	24
Simple assault	65	52	52	56

Figure 5

- When the victim of violence perceived that the offender was using only alcohol at the time of the offense, nearly two-thirds of the victimizations were reported to have been simple assault (figure 5). Robbery accounted for about 6% of the violent victimizations involving a drinking offender but 19% of the incidents where the offender was perceived to have been using drugs.
- Victim perceptions of offender use of alcohol translate into an estimated 457,000 alcohol-involved violent victimizations between victims and offenders who share an intimate relationship. Drinking offenders were also responsible for about 118,000 incidents of violence between family members (excluding spouses), an estimated 744,000 violent incidents between acquaintances, and about 1,360,000 incidents of violence committed against a stranger (figure 6).

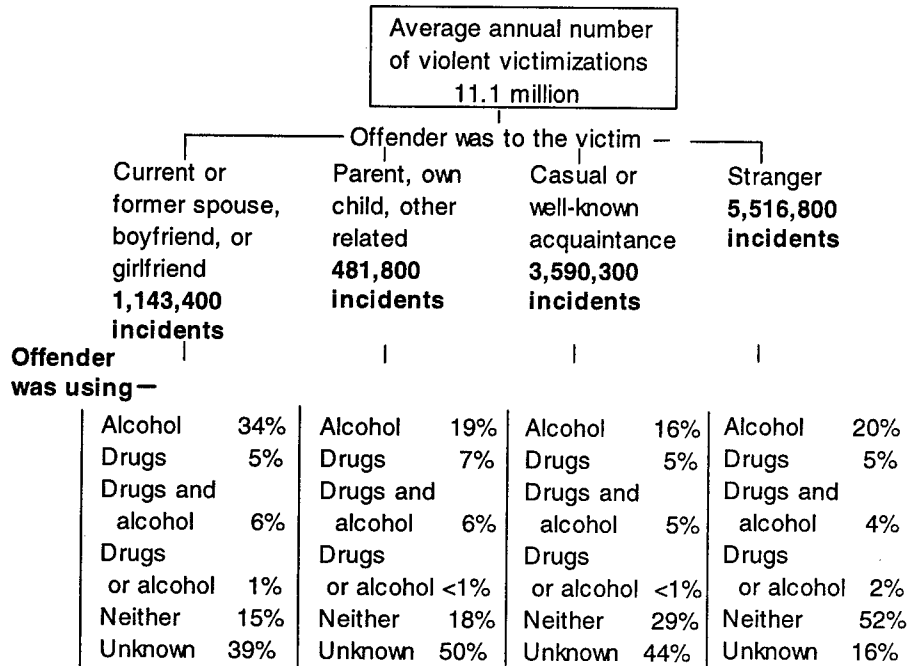
Drinking, intimate violence, and race

On average, there are about 1 million incidents of violence each year in which women are the victims of an intimate assailant — a current or former spouse, boyfriend, or girlfriend. Among the women who knew whether the offender had been drinking or using drugs, about

two-thirds of both black and white victims reported that the offender with whom they shared an intimate relationship had been drinking.

Offender using	Percent of female victims of intimate violence		
	All	White	Black
Alcohol only	57%	58%	50%
Drugs only	8	9	7
Both	11	10	12
Either	2	1	4
Neither	22	21	27

Alcohol was part of about 40% of the violent victimizations of a current or former spouse, boyfriend, or girlfriend. About 20% to 25% of victims who were strangers, acquaintances, or nonintimate relatives to the violent offender reported that person to have been drinking.



Note: Figure excludes details on 362,900 incidents for which victims did not report their relationship to the offender or could not estimate the number of offenders involved.

Figure 6

About 1 in 5 victims of violence who perceived the offender to have been using alcohol at the time of the offense, a half million victims each year, suffered a financial loss due to medical expenses, broken or stolen property, or lost wages — a total annual loss of \$400 million.

Type of expense/loss	Average loss per victim	Estimated total annual loss
Total	\$834	\$408,100,000
Medical expenses	\$1,490	\$229,000,000
Cash loss	\$136	\$8,200,000
Property		
Loss	\$500	\$50,000,000
Repair	\$218	\$33,900,000
Replacement	\$308	\$26,100,000
Lost pay from —		
Injury	\$619	\$45,300,000
Other causes	\$390	\$15,500,000

Figure 7

Alcohol and crime on U.S. campuses

Beginning in 1995, BJS modified its victimization survey to determine if a sampled household is on a college campus and if any household members are college students. With this more precise information, it has become possible to learn more about the victimization experience of college students, both those who live on campus and those who live off campus.

College students reported about 463,000 violent victimizations in 1995 in which alcohol use by the offender was a factor. An estimated 22% of the alcohol-involved incidents were perceived to have also involved offender drug use. An estimated 90% of the alcohol-involved violent victimizations affecting college students occurred off campus.

- Among the 15.4 million college students in 1995, about 1.5 million experienced a violent crime.

- About 87% of the violent crimes sustained by college students occurred off campus.

- Overall, about 24% of the victims of violence reported the offender was using alcohol at the time of the offense; about 4% described offender drug use; and about 8% said that the offender was using both drugs and alcohol or that they could not tell which.

- Just over 43% of the victims of violence were certain no drugs or alcohol had been involved in the offense.

- Just over 20% did not know whether the offender was using either drugs or alcohol.

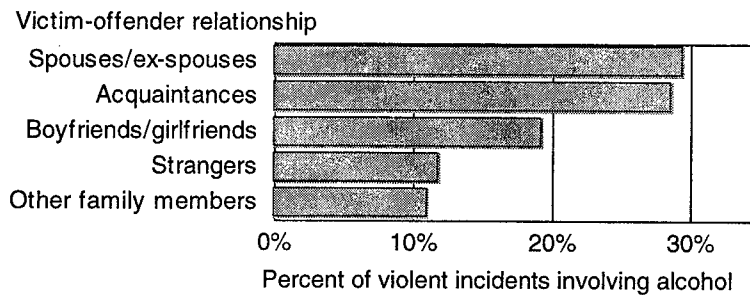
- Per capita arrest rates for liquor law violations are highest at public 4-year colleges. See *Appendix II*, page 33.

U.S. college students number nationwide 15.4 million

Living on campus 2.2 million		Living off campus 13.2 million	
Victims of violence 194,000		Victims of violence 1.3 million	
Violence occurred		Violence occurred	
On campus	Off campus	On campus	Off campus
59,000	135,000	136,000	1,179,000
Alcohol involved	Alcohol involved	Alcohol involved	Alcohol involved
41%	37%	18%	31%

Figure 8

About half of all violent incidents in which alcohol was present and for which the police completed an incident report in 1995 involved victims and offenders in an intimate relationship, including current and former spouses, boyfriends, and girlfriends.



Source: FBI, National Incident-Based Reporting System, 1995.

Figure 9

Incident-based data on alcohol and violent crime

The National Incident-Based Reporting System (NIBRS) represents the next generation of crime data from law enforcement agencies. It is designed to replace the nearly 70-year-old summary Uniform Crime Reporting Program of the FBI that compiles aggregate data on eight crimes. NIBRS utilizes information from individual crime reports recorded by police officers at the time of the incident. Rather than relying upon a group of 8 Index offenses to convey the overall crime situation, NIBRS collects information on 57 types of crimes.

In addition, NIBRS provides the opportunity to analyze a wide array of contingencies of crime: who the victim was, the relationship of the victim to the offender, age of both victim and offender, where and when the incident occurred, whether alcohol may have been involved in the offense, and the consequences of the crime such as injuries and property loss. A significant benefit of NIBRS is that the

report of the incident asks the investigating officer to indicate suspected alcohol use by the offender.

Incident-based data on alcohol-involved violence, from jurisdictions which maintained such records of crime in 1995, provide details on such violence not available from most law enforcement agencies:⁴

- About half of the incidents of alcohol-related violence recorded in the NIBRS 1995 dataset involved offenders and victims who were intimates — current or former spouses, boyfriends or girlfriends (figure 9).

⁴Data for 1995 were obtained from law enforcement agencies in nine States. The violent offenses utilized in this analysis included murder and nonnegligent manslaughter, aggravated assault, simple assault, and intimidation. Coverage for these data is estimated to be about 2% of murders in the United States, 4% of reported aggravated assaults, and an unknown percentage of simple assault and intimidation offenses.

In those violent incidents recorded by the police in which alcohol was a factor, about 9% of the offenders and nearly 14% of the victims were under age 21.

Age	Percent in violent incidents	
	Offenders	Victims
14 or younger	0.3%	2.5%
15-17	2.2	3.8
18-20	6.2	7.2
21-24	10.6	14.1
25-29	18.0	17.6
30-39	37.9	34.6
40-49	16.2	14.3
50 or older	8.6	5.9

Source: FBI, National Incident-Based Reporting System, 1995.

Figure 10

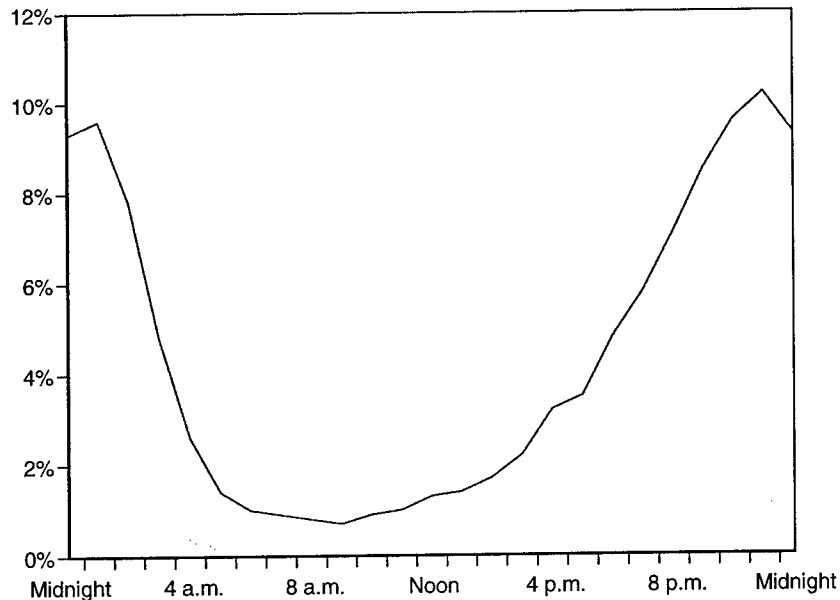
- In just over 6% of the incidents of alcohol-related violence, victims were children under the age of 18 (figure 10). About 9% of the offenders who were suspected of having been drinking in violent incidents were under the legal drinking age of 21.

- About 7 out of 10 alcohol-involved violent incidents occurred in a residence; 1 in 10 occurred in a bar or restaurant.

- The largest number of violent incidents involving alcohol use by the offender were found to occur in the hour beginning at 11 p.m.; the fewest incidents occurred at 9 a.m. (figure 11).

Violent incidents occurring between 11 p.m. and midnight are the most likely to involve alcohol.

Percent of an entire day's violent incidents involving alcohol



Source: FBI, National Incident-Based Reporting System, 1995.

Figure 11

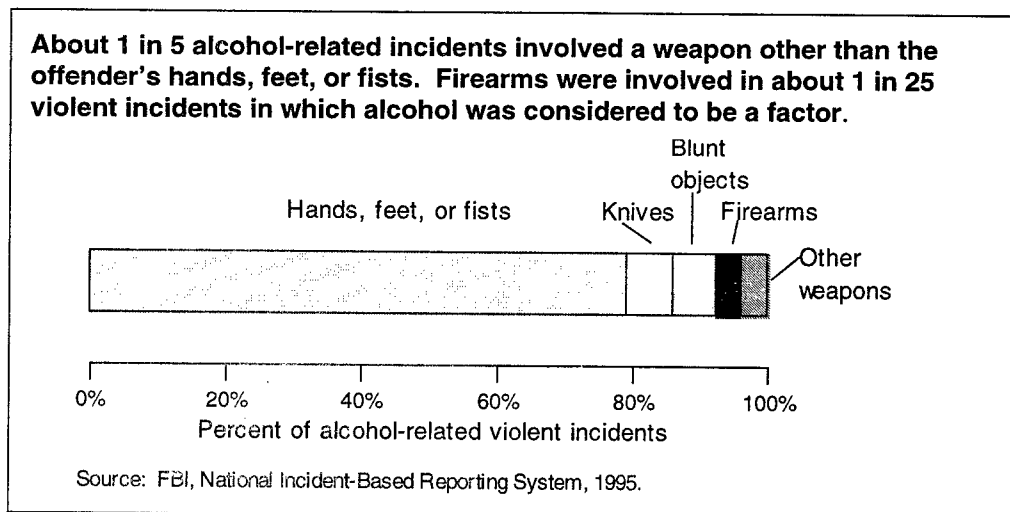


Figure 12

- Nearly 80% of violent incidents in which the offender had been drinking involved the use of hands, fists, or feet by the offender (figure 12).

Firearms were involved in about 4% of the alcohol-related violent incidents.

About 6 in 10 incidents of alcohol-related violence brought to the attention of the police resulted in an injury to the victim.

Male and female victims of such violence were about equally likely to have experienced an injury, according to police incident records. Male victims were about twice as likely as the females to have sustained a major injury, largely because of the higher level of reported severe lacerations.

	Percent of victims		
	All	Male	Female
Uninjured	39%	39%	38%
Injury	61%	61%	62%
Major injury	10	16	7
Broken bones	1	2	1
Severe lacerations	6	10	4
Internal injuries, teeth knocked out, knocked unconscious	1	1	1
Other major injuries	2	3	2
Minor injury	51	45	55

Source: FBI, National Incident-Based Reporting System, 1995.

Figure 13

Compared to their share of licensed drivers, DUI arrestees are overrepresented at each age from 18 through 44.

Persons under the legal drinking age of 21 account for about 8% of DUI arrestees. About 7% of licensed drivers are between the ages 21 and 24, but this age group accounts for nearly 15% of DUI arrests. By contrast, those age 50 or older account for a third of all drivers but 9% of DUI arrestees.

Age	Percent	
	Licensed drivers	DUI arrestees
16	.9%	.3%
17	1.3	.8
18	1.4	1.8
19	1.6	2.4
20	1.6	2.6
21	1.6	3.6
22	1.7	3.6
23	1.7	3.6
24	1.8	3.7
25-29	10.2	17.2
30-34	11.1	17.3
35-39	11.7	15.7
40-44	10.9	11.1
45-49	9.7	7.3
50 or older	32.8	9.0
Total number	179,500,000	1,466,300

Sources: Department of Transportation, *Highway Statistics, 1996* and FBI, *Crime in the U.S., 1996*.

Figure 14

DUI/DWI: Arrests and fatal accidents

Driving while under the influence of alcohol (DUI), which also includes driving while under the influence of drugs and driving while intoxicated (DWI) represent the most common reasons for arrests by the police. In 1996 DUI accounted for 1 in 10 arrests for all crimes nationwide, an estimated 1,467,300 arrests. That same year, an estimated 10,000 intoxicated drivers were involved in fatal motor vehicle accidents resulting in about 13,400 deaths.⁵

• The number of DUI arrests has been declining:

- In 1983, the highest recorded year for DUI arrests in the last 30 years, local law enforcement agencies reported 1,921,100 arrests for DUI from a population of 154.4 million licensed drivers, about 1 arrest for every 80 licensed drivers.
- In 1996 there were 1,467,300 arrests for DUI (including persons under age 16) with a licensed driver population numbering 179.5 million, a rate of 1 arrest for every 122 licensed drivers.

This represents a 34% reduction in the per capita rate of DUI arrest nationwide over the period.

⁵The National Highway Traffic Safety Administration defines intoxicated drivers as those with a blood alcohol concentration (BAC) of 0.10 grams of alcohol per deciliter of blood or higher, the legal measure of intoxication in most States.

- Declines in DUI arrest rates have occurred for every category of age (figure 15). The age group with the highest per capita rate of arrest for DUI, 21-year-olds, had a rate of 1 arrest for every 42 drivers in 1990 which dropped to 1 arrest for every 56 drivers in 1996 — a 24% decrease.

- The largest decrease in DUI arrest rates since 1990 has occurred among those age 25 to 29 (-31%) while arrest rates have declined less than 10% among persons age 16 and between ages 35 and 44.

- From the early to mid-1970's, States lowered the minimum age for the purchase or sale of alcoholic beverages. Between 1970 and 1973, 24

States reduced the minimum age, and by 1983, the peak year for DUI arrests, 33 States had a minimum age below 21.⁶

- As a result of changes in Federal highway funds legislation, all States raised the minimum age to 21. In 1980 persons under age 21 accounted for 10% of licensed drivers but 15% of those arrested for DUI, a 50% overrepresentation for drivers of this age. By contrast, in 1996, persons under age 21 accounted for 7% of drivers and 8% of arrestees for DUI, a substantially reduced disparity compared to 1980.

⁶This change primarily reflected ratification of the 26th amendment (1971) that extended the right to vote to 18 year-olds.

The number of arrests for DUI per 1,000 licensed drivers dropped 24% from 1990 to 1996.

The decline in arrest rates occurred for every age category, with the drivers ages 25 to 29 having the largest percentage decrease.

Age	DUI arrest rate per 1,000 drivers		Percent change in rates of DUI arrests, 1990-96
	1990	1996	
All ages	10.8	8.2	-24.1%
16	3.5	3.2	-8.6
17	6.6	5.3	-19.7
18	14.1	10.6	-24.8
19	17.0	12.5	-26.5
20	18.5	13.2	-28.6
21	23.8	18.0	-24.4
22	23.1	17.3	-25.1
23	22.1	16.9	-23.5
24	20.6	16.3	-20.9
25-29	20.0	13.8	-31.0
30-34	16.1	12.7	-21.1
35-39	11.9	11.0	-7.6
40-44	8.9	8.3	-6.7
45-49	7.1	6.1	-14.1
50 or older	2.7	2.2	-18.5

Figure 15

• The National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation estimates that in 1996, there were 17,126 alcohol-related fatalities accounting for 40.9% of all traffic fatalities during the year.⁷ This represents a 29% reduction from the 24,045 alcohol-related fatalities in 1986, a year in which alcohol-related crashes accounted for 52% of the fatalities. NHTSA also estimates that during 1996 about 7% of all crashes (both fatal and nonfatal) were alcohol-related and more than 321,000 persons were injured in such crashes.

• While nearly 41% of traffic fatalities in 1996 were alcohol-related, an estimated 32% involved an intoxicated driver or pedestrian (BAC=0.10 g/dl or higher) — a total of 13,395 fatalities. Among these fatalities, about 70% were themselves intoxicated. In 1996 local law enforcement authorities carried out 140 arrests for DUI per intoxicated driver involved in a fatal crash.

• Rates of intoxication among drivers in fatal accidents have declined for every age group over the last decade. In 1986 an estimated 26% of drivers had a BAC of at least 0.10 g/dl while in 1996 about 19% were estimated to have had a BAC at this level.

⁷NHTSA defines alcohol-related as any fatal traffic crash in which a driver or pedestrian had a measureable non-zero BAC (0.01 g/dl or higher). Intoxication is defined as 0.10 g/dl or higher.

Comparing 1986 to 1996 by age, the percentage of drivers in fatal accidents who were intoxicated:

Age	Percent of drivers in fatal accidents who were intoxicated	
	1986	1996
All drivers	25.8%	18.8%
16-20 years	23.7	14.1
21-24	36.1	27.0
25-34	33.0	26.2
35-44	24.5	21.9
45-64	16.2	13.6
65 or older	6.8	5.4

• In 1986 there were about 1 intoxicated driver in a fatal accident for every 10,500 licensed drivers. By 1996, this rate had improved to 1 intoxicated driver involved in a fatal accident for every 17,200 licensed drivers. Rates of involvement in driving while intoxicated in fatal accidents (the number of intoxicated drivers in fatal accidents per 100,000 licensed drivers) have decreased across each age group over the last decade:

	Number of intoxicated drivers in fatal accidents per 100,000 licensed drivers			Change in rate
	1986	1996		
All drivers	9.5	5.8		-39%
16-20 years	18.6	9.1		-51
21-24	22.3	13.5		-39
25-34	13.3	8.8		-34
35-44	7.1	5.9		-17
45-64	3.7	3.0		-19
65 or older	1.7	1.4		-18

• Alcohol involvement in fatal accidents during 1996 varied across the States ranging from 24% of the traffic fatalities in Utah to more than half the fatalities in Alaska, Louisiana, Nevada, New Mexico, North Dakota, Texas, and Washington (figure 16).

	Number of fatalities	Percent of fatalities			Number of fatalities	Percent of fatalities	
		In- volved alcohol	Drivers had a BAC 0.10 or higher			In- volved alcohol	Drivers had a BAC 0.10 or higher
U.S. total	41,907	40.9%	32.0%	Missouri	1,149	49.4%	38.7%
Alabama	1,143	42.6	34.1	Montana	200	37.1	33.0
Alaska	80	51.1	44.4	Nebraska	293	33.6	26.0
Arizona	993	43.9	34.8	Nevada	348	50.1	37.3
Arkansas	615	34.7	26.9	New Hampshire	134	34.7	26.4
California	3,989	40.2	30.1	New Jersey	818	34.2	25.4
Colorado	617	39.6	33.0	New Mexico	481	50.1	42.0
Connecticut	310	49.2	38.2	New York	1,564	33.4	24.0
Delaware	116	41.0	28.5	North Carolina	1,493	35.1	27.8
District of Columbia	62	49.2	36.0	North Dakota	85	53.4	44.9
Florida	2,753	36.9	29.1	Ohio	1,395	33.0	25.6
Georgia	1,574	36.0	27.6	Oklahoma	772	36.3	28.2
Hawaii	148	44.4	31.5	Oregon	524	42.2	32.6
Idaho	258	33.8	26.0	Pennsylvania	1,469	39.1	32.3
Illinois	1,477	45.0	36.1	Rhode Island	69	48.4	36.2
Indiana	984	34.1	27.0	South Carolina	930	42.4	33.6
Iowa	465	42.5	33.0	South Dakota	175	39.9	31.1
Kansas	491	40.9	30.0	Tennessee	1,239	40.2	32.8
Kentucky	841	35.2	28.1	Texas	3,741	53.2	42.3
Louisiana	781	51.4	39.6	Utah	321	23.7	18.7
Maine	169	37.5	29.0	Vermont	88	43.9	36.9
Maryland	608	33.0	24.0	Virginia	875	38.6	30.2
Massachusetts	417	44.4	32.0	Washington	712	50.0	40.1
Michigan	1,505	40.7	31.6	West Virginia	345	38.0	31.6
Minnesota	576	37.9	30.0	Wisconsin	761	42.4	34.2
Mississippi	811	41.6	33.1	Wyoming	143	40.6	26.2

Source: *Alcohol Traffic Safety Facts 1996*, National Highway Traffic Safety Administration.

Figure 16

Examining BAC factors

Knowledge of the level of intoxication of drivers in fatal accidents is derived from the Fatal Accident Reporting System (FARS) which gathers data on a wide variety of issues relating to fatal accidents, including driver, vehicle, and environmental factors associated with the crash. Initiated in 1975 by the National Highway Traffic Safety Administration, data on fatal vehicle accidents are compiled by State officials from police reports, files of State vehicle registration and drivers' licenses, death certificates, hospital records, and other sources and submitted under the FARS reporting program. Crashes occurring on public roads in which a vehicle passenger or nonpassenger (such as a pedestrian or cyclist) dies within 30 days are included.

BAC levels of drivers or pedestrians in fatal accidents may be measured in a variety of ways using testing methods which examine samples of blood, breath, urine, saliva, or other analyses of body tissue. Given that BAC declines over time (BAC levels decrease by about 0.015 g/dl per hour), measured BAC levels among surviving drivers in fatal accidents would be somewhat less than the actual BAC at the time of the crash.⁸

⁸FARS data in the following analyses were obtained from the *Traffic Safety CD-ROM: 1996*, produced by the Bureau of Transportation Statistics. This dataset contains annual FARS data files for the first two decades of the program, 1975-94.

- FARS data on BAC for crashes occurring in 1994 indicate that such information is available for a third of fatal accidents. However, BAC test results are available for about 60% of the drivers in fatal accidents who were identified, presumably by police officers or others, as having been drinking drivers.

- Among those crashes in which persons were tested for BAC, an estimated 59% were found to have a BAC of zero and 41% had a positive BAC of .01 g/dl or higher (figure 17).

4 out of 10 fatal motor vehicle accidents had a drinking driver. A third of such accidents involved a driver who had been drinking and whose BAC was at least 0.08.

Blood alcohol concentration	Percent of fatal accidents
0	58.6%
0.01-0.05	4.7
0.06-0.07	1.9
0.08-0.09	2.4
0.10-0.19	17.2
0.20-0.25	9.1
0.26-0.29	3.5
0.3	2.6

Note: BAC is measured and reported for about a third of the 92,000 fatal motor vehicle accidents in 1994. Data shown here and in subsequent figures are based on those accidents where the BAC of the driver was known.

Source: Fatal Accident Reporting System, 1994.

Figure 17

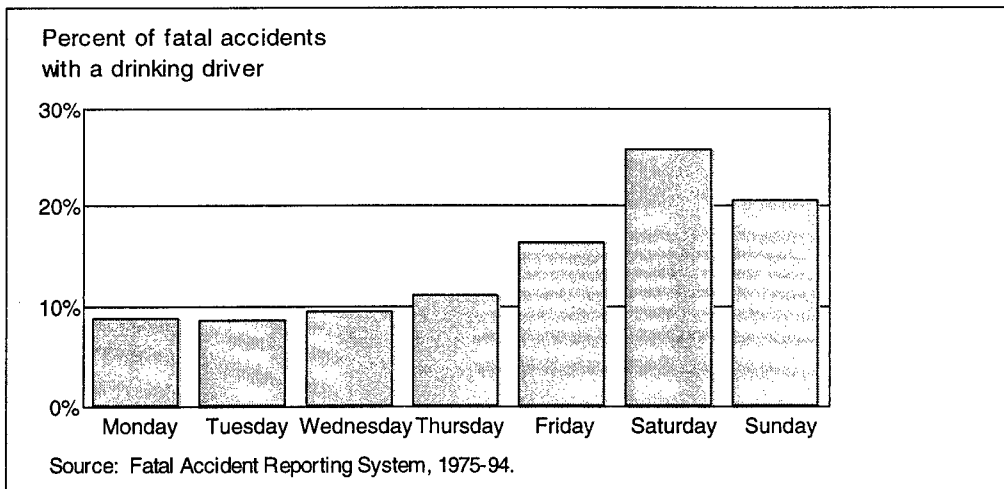


Figure 18

- An estimated 34% of fatal accidents in which alcohol tests were conducted reflected BAC levels of 0.08 or higher.⁹

⁹About 97% of those with positive BAC's (.01 g/dl or higher) in the 1994 dataset were drivers in fatal accidents. The remainder were pedestrians, cyclists, and nonoccupants who were tested and reported as involved in the fatal crash.

Fatal accident data for 1996 indicate that alcohol is more likely to be a factor at night — 62% of fatal crashes at night involved alcohol — than in the daytime when 18% were alcohol-involved.

- Nearly half of all fatal accidents in which the driver has been drinking occur on the weekend (figure 18). The

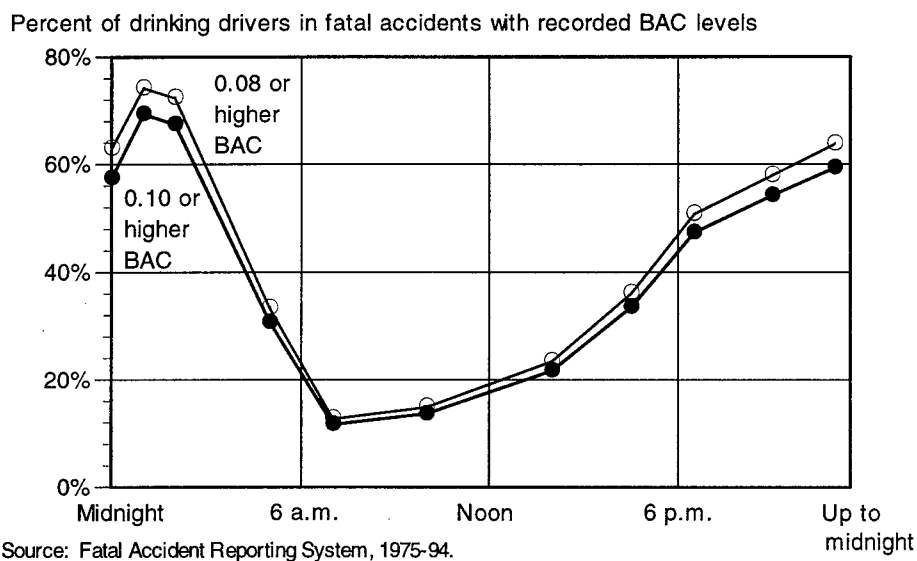
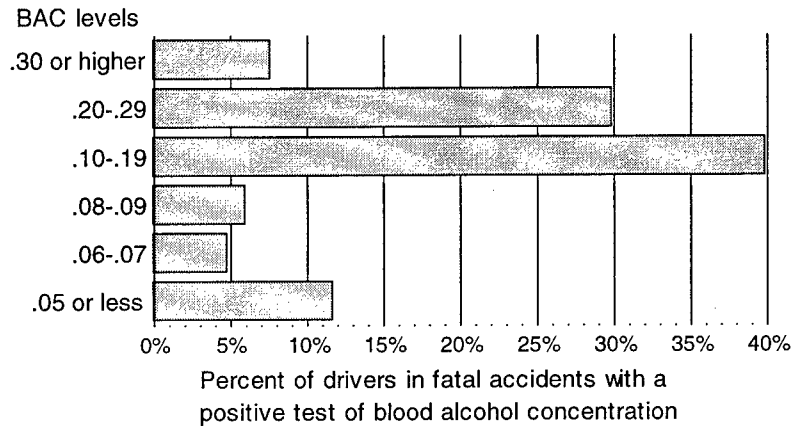


Figure 19

Of those drivers who were drinking before a fatal crash, 40% had a BAC between 0.10 and 0.19, and 38% had a BAC of 0.20 or higher. To reach a BAC above 0.10, a man of average size and metabolism would have to drink two drinks every hour for 4 hours.



Source: Fatal Accident Reporting System, 1975-94.

Figure 20

rate of alcohol involvement in 1996 fatal crashes occurring during the weekend was 54% compared to 31% during the week.

- About 84% of drinking drivers in fatal accidents in 1994 were reported to have been at 0.08 g/dl or higher (figure 20). About 78% were at 0.10 g/dl or higher.

About 4 in 10 drivers in fatal accidents with a drinking driver age 30 or older had a BAC level above 0.20.

Age of drinking driver	Percent of all drinking drivers		
	BAC's above 0.10	BAC's above 0.20	BAC's 0.05 or less
All	75%	30%	11%
16-19	62	14	16
20-24	73	23	11
25-29	79	32	9
30-34	81	37	8
35-39	81	40	9
40-44	81	42	9
45-49	81	43	9
50 or older	74	38	15

- Over the first 20 years of record-keeping by NHTSA on fatal motor vehicle accidents, BAC data indicating alcohol consumption by a driver involved in the accident are available for nearly a quarter million drivers in crashes in which a death occurred. Among these drinking drivers, about 3 out of 4 had a BAC of at least 0.10 g/dl and just under a third were about twice that level — 0.20 g/dl or higher (figure 21).

Source: Fatal Accident Reporting System, 1975-94.

Figure 21

Among drinking drivers involved in fatal accidents in 1994, the highest BAC levels were recorded for persons from age 40 to 44, those whose license was suspended, and those with prior DWI convictions.

Drinking drivers	Fatal accidents	
	Average BAC	Percent of drinking drivers
All	0.16	100%
15 or younger	0.12	0.3%
16-19	0.12	9.0
20-24	0.15	21.2
25-29	0.16	16.9
30-34	0.17	15.9
35-39	0.18	12.3
40-44	0.19	8.0
45-49	0.18	6.1
50 or older	0.17	10.4
Male	0.16	85.4%
Female	0.16	14.6
Drivers' license		
Valid	0.16	76.2%
Suspended	0.18	23.8
Prior DWI convictions		
None	0.16	88.2%
1 or more	0.20	11.8

Source: Fatal Accident Reporting System, 1994.

Figure 22

- The average BAC among drinking drivers in fatal accidents in 1994 was 0.16 g/dl (figure 20).

In fatal motor vehicle accidents —

The highest average BAC among drinking drivers was found for those from age 40 to 44 (0.19 g/dl).

Just under 12% of drinking drivers were known to have had prior convictions for DWI.

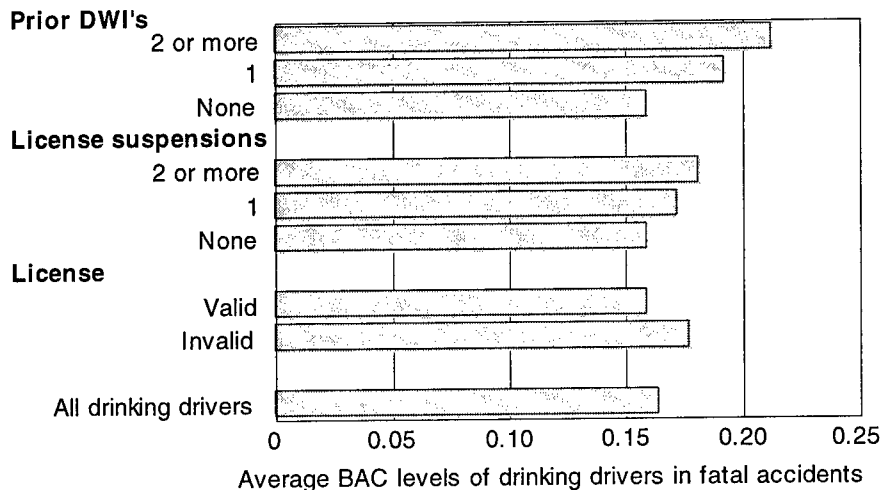
The average level of intoxication was about 25% higher for these repeat offenders than among those who had no reported prior DWI convictions.

- The greater the number of prior license suspensions and DWI convictions, the higher the average BAC among drinking drivers involved in fatal accidents (figure 23). Those with two prior DWI convictions had an average BAC which was 10% higher than those with one prior conviction and 33% higher than those with no prior convictions.

- There was substantial variation in driving background among those at different levels of intoxication (figure 24). Those with the highest blood alcohol concentrations, 0.30g/dl, were about 4 times as likely as those not drinking to have had no valid license at the time of the crash and about 7 times as likely to have had prior DWI convictions. At each intoxication level shown, the driving record of the fatal accident driver worsened.

BAC records of drivers in fatal accidents show that the levels of intoxication at the time of the accident vary with the driving record.

Among drivers in fatal accidents, the highest average BAC level, 0.21, or more than twice the legally defined level of intoxication in most States, was found for those with 2 or more prior DWI convictions.



Source: Fatal Accident Reporting System, 1994.

Figure 23

Driving record of drivers in fatal crashes	BAC levels					
	0	0.01- 0.07	0.08- 0.09	0.10- 0.19	0.20- 0.29	0.30+
Total	100%	100%	100%	100%	100%	100%
License status at time of accident						
Valid	92	81	80	78	73	66
Invalid	8	19	20	22	27	34
Number of prior license suspensions						
None	91	82	78	77	71	69
1	5	9	13	12	14	11
2 or more	4	9	9	11	14	20
Prior DWI convictions						
None	98	94	93	90	83	80
1	2	5	7	8	13	13
2 or more	<1	1	<1	2	3	7

Note: Table does not show those for whom the license status was unknown or for whom BAC was not measured.

Source: Fatal Accident Reporting System, 1994.

Figure 24

On an average day in 1996, an estimated 5.3 million convicted offenders were under the supervision of criminal justice authorities. Nearly 40% of these offenders, about 2 million, had been using alcohol at the time of the offense for which they were convicted.

Correctional authority	Number	Convicted offenders	
		Estimated percent- age using alcohol at the time of the offense	Estimated number of offenders for whom alcohol was a factor in their crime
Probation	3,180,363	39.9%	1,268,965
Local jail	215,136	39.5	84,979
State prison	1,074,976	32.3	347,217
Federal prison	105,544	11.0	11,610
Parole	704,709	29.3	206,480
Total	5,280,728	36.3%	1,919,251

Note: The prevalence of alcohol use at the time of offense for parolees was estimated by applying the known percentages for prisoners by offense to the composition of the prison exit cohort.

Figure 25

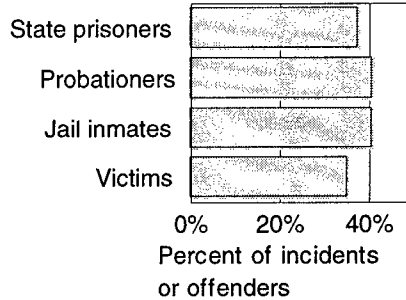
Use of alcohol by convicted offenders

More than 36% of the 5.3 million convicted adult offenders under the jurisdiction of probation authorities, jails, prisons, or parole agencies in 1996 had been drinking at the time of the offenses for which they had been convicted. This translates into just under 2 million convicted offenders nationwide on an average day— 1.3 million on probation, 85,000 in local jails, 360,000 in State and Federal prisons, and more than 200,000 under parole supervision— for whom alcohol use was a factor in their crime (figure 25).

BJS periodically conducts surveys among the Nation's offender population in order to learn more about their backgrounds. Representative samples of probationers and those in local jails and State and Federal prisons are interviewed about their criminal histories, family backgrounds, and many elements of the current offense. Among the topics of interest is their experience with alcohol, both in the past and at the time of the crime. These data represent detailed information not typically available from official records and provide the only uniform national description of offender use of alcohol.

Victims and offenders both report that about 4 in 10 violent crimes involved alcohol use by the offender.

Self reports



Note: Estimates for victims are based on those who reported knowing if the offender used or did not use alcohol/drugs.

• As would be expected, those convicted of public-order crimes such as DWI, weapons offenses, and commercial vice are the most likely to report the use of alcohol at the time of the offense (figure 27). For more than 4 in 10 convicted murderers, being held either in jail or in State prison, alcohol use is reported to have been a factor in the crime. Nearly half of those convicted of assault and sentenced to probation had been drinking when the offense occurred.

Figure 26

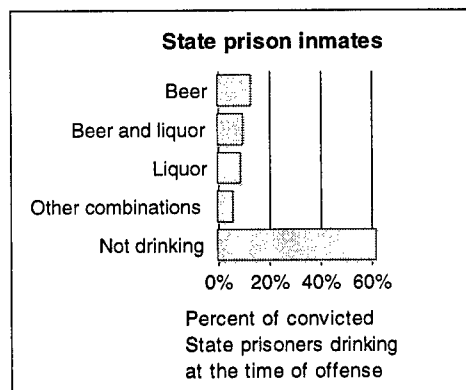
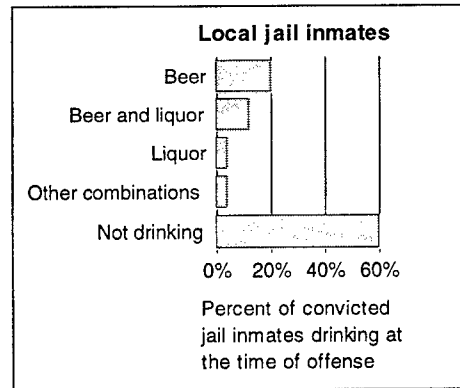
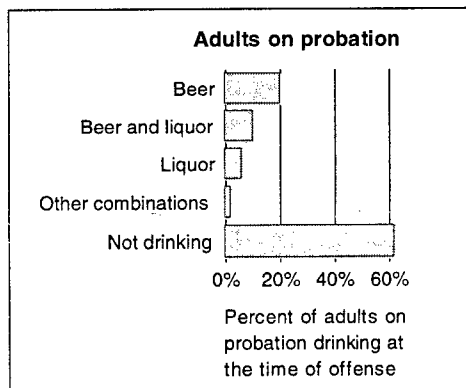
Similar percentages of offenders on probation and in jail or State prison committed their crimes while drinking.

	Percent of offenders drinking at the time of the offense			
	Adults on probation	Convicted offenders in local jails	Convicted offenders in State prisons	Convicted offenders in Federal prisons
All offenses	39.9%	39.5%	32.3%	11.0%
Violent offenses	40.7%	40.6%	37.5%	20.4%
Murder	*	43.7	41.4	37.2
Rape/sexual assault	31.8	31.5	35.9	26.5
Robbery	*	37.6	32.7	13.9
Assault	45.5	45.4	41.6	38.1
Property offenses	18.5%	32.8%	31.8%	8.1%
Burglary	38.5	38.2	34.7	15.3
Larceny	16.3	31.6	29.2	15.4
Fraud	9.7	21.6	18.9	5.3
Drug offenses	16.3%	28.8%	18.0%	8.2%
Possession	14.4	28.6	18.3	8.3
Trafficking	16.2	28.4	17.5	8.3
Public-order offenses	75.1%	56.0%	43.0%	13.1%

Note: Data for this table are drawn from the 1996 Survey of Adults on Probation, the 1996 Survey of Inmates in Local Jails, and the 1991 Survey of Inmates in State and Federal Correctional Facilities.

*Too few cases for estimate to be made.

Figure 27



Figures 28a, b, and c

- Regardless of the type of corrections status, offenders were about equally likely to have been drinking at the time of the crime. What they consumed was similar, with beer being the most commonly used alcoholic beverage: 30% of probationers, 32% of jail inmates, and 23% of State prisoners said that they had been drinking beer or beer in combination with liquor prior to the commission of the current offense (figures 28a, b, and c). Consumption of wine alone was comparatively rare among the surveyed offender populations.

- On average, the consumption of an ounce of ethanol is equal to drinking about two 12-ounce beers. Among offenders who drank during the 8 hours or less before the offense, the amount of

ethanol consumed varied by correctional status and by offense.

Probationers were estimated to have consumed about 4.7 ounces of ethanol, the equivalent of about 9 beers. By contrast, jail inmates self-reported ethanol consumption equaling about 11 beers, and prisoners drank the equivalent of 15 beers during a period of up to 8 hours prior to the crime. The highest overall consumption prior to the offense was reported by State prisoners serving time after conviction for a property offense. The amount of ethanol consumed among offenders in the immediate period (up to 8 hours) preceding the offense was:

Type of offense	Ounces of ethanol consumed in a period up to 8 hours before the crime		
	Probationers	Jail inmates	State prison inmates
All offenders	4.7 oz	5.6 oz	7.5 oz
Violent	5.6	6.0	7.8
Property	6.5	6.4	8.3
Drugs	4.0	4.6	5.4
Public-order	4.2	5.5	6.5

While about 33% of State prisoners and nearly 40% of convicted offenders under probation supervision or in local jails reported drinking at the time of the offense, estimates of the average blood alcohol concentration (BAC) suggest that State prisoners were more severely intoxicated when they committed their crime.

Type of offense	Offenders who reported drinking at the time of the offense — estimated average BAC at the time of the offense		
	Probationers	Local jail inmates	State prisoners
All offenders	0.16	0.19	0.27
Violent	0.18	0.20	0.28
Homicide	0.22	0.26	0.28
Sexual assault	0.13	0.25	0.28
Robbery	0.32	0.22	0.28
Assault	0.18	0.18	0.30
Property	0.24	0.22	0.30
Burglary	0.26	0.24	0.31
Larceny	0.23	0.23	0.28
Motor vehicle theft	0.34	0.19	0.29
Drugs	0.14	0.15	0.19
Public-order	0.14	0.19	0.23

Note: See Appendix 1, page 32, for calculation of the BAC. Analysis was limited to persons reporting drinking for 8 hours or less preceding the offense.

Figure 29

- BJS surveys gather information on the type of beverage consumed at the time of the crime, the amount of each type of alcoholic beverage consumed, and the time spent drinking prior to the occurrence of the offense. Together with the offenders' self-reported body weight, it is possible to estimate the BAC of each offender at the time the offense was committed (figure 29).¹⁰

¹⁰The National Highway Traffic Safety Administration provided a formula to BJS which takes these factors into account and reduces BAC based upon a standardized rate at which the body metabolizes ethanol. See Appendix 1 for details.

- These self-reports indicate that those offenders in State prisons, though a smaller percentage had been drinking at the time, were considerably more intoxicated when the crime occurred than those on probation or being held in local jails. Those convicted offenders on probation and in local jails appear, on average, to be about as intoxicated as drivers in fatal accidents (average BAC was about 0.17 g/dl for fatal accident drivers from the FARS data for 1994) when they committed their crimes. Such comparative data on estimated levels of intoxication at the time of the crime have never been reported previously for a nationally representative sample of offenders.

Offenders on probation and alcohol use

- About a quarter of the women on probation nationwide had been drinking at the time of the offense compared to more than 40% of male probationers (figure 30). For those convicted of public-order crimes, nearly two-thirds of women and three-quarters of men had been drinking at the time of the offense.

- Probationers described a variety of behaviors at some time in their lives when drinking:

About half of all probationers reported that they had driven a vehicle while under the influence of alcohol.

About half of all probationers had engaged in arguments with family or friends while drinking.

About a third of probationers had gotten into a physical fight with someone after drinking.

Percent of adults on probation who had used alcohol at the time of their offense

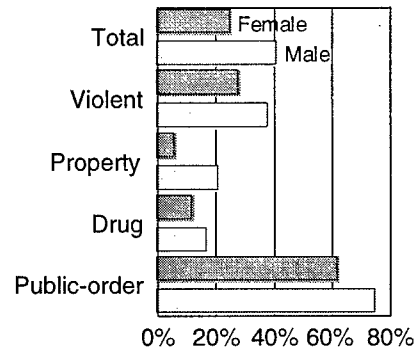
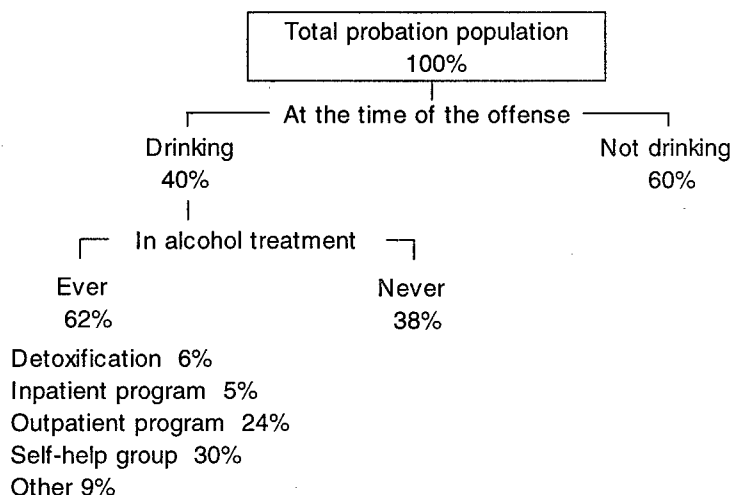


Figure 30

More than a third of probationers reported that they had consumed the equivalent of a fifth of liquor in a day. About 1 in 12 probationers said they had a lost a job because of drinking.

- Estimates of BAC for probationers at the time of the offense were higher



Note: Probationers may have participated in more than one type of treatment. The self-help groups include Alcoholics Anonymous (AA) and a variety of other organizations.

Figure 31

among those describing themselves as daily drinkers (0.19 g/dl) compared to those who typically drank less often (0.15 g/dl). The number of hours spent drinking was an important factor in the level of intoxication at the time of the offense:

Hours drinking	Average BAC
1	.08
2	.10
3	.14
4	.19
5 or more	.22

- Among those offenders drinking at the time of the offense, an estimated 62% had previously participated in an alcohol treatment program (figure 31).

- About a third of all probationers reported that they had received some form of alcohol treatment since being placed on probation. More than 6 in 10 probationers who had been under the influence of alcohol at the time of their offense said they had been involved in an alcohol treatment

program since entering probation supervision.

Percent of probationers receiving treatment after being placed on probation

Type of program	All	Drinking when committed offense
Any	32%	62%
Crisis/detox	4	9
Self-help (AA-type group)	24	48
Counseling	8	14
Outpatient	18	38
Inpatient	4	8

Local jail inmates and alcohol use

- As found among probationers, convicted males in local jails were more likely than convicted females to report alcohol use at the time of the offense, though the disparity by gender was smaller (figure 32). For every type of offense, except for public order crimes, women in jail reported greater use of alcohol at the time of the offense than was the case for women under probation supervision in the community (figure 30).

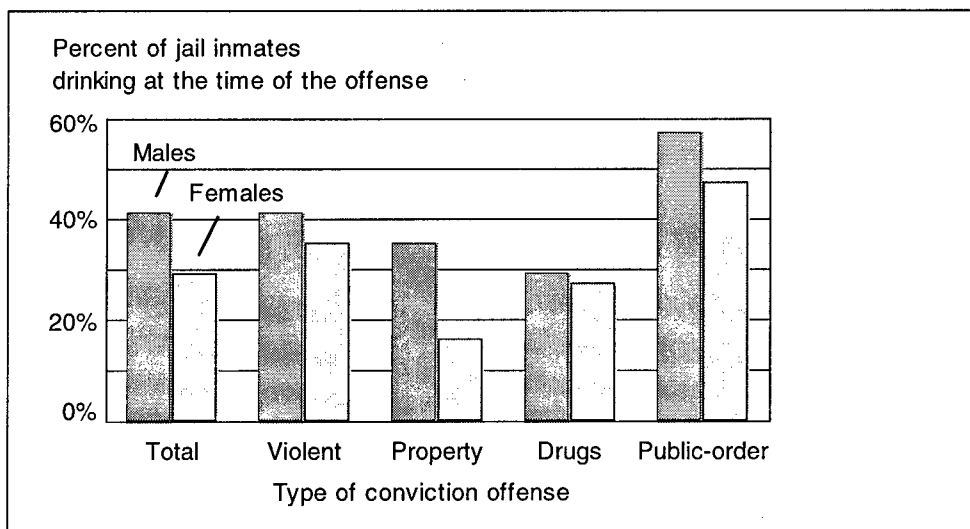


Figure 32

Overall, about two-thirds of convicted offenders in local jails who reported that they had been drinking at the time of the offense were estimated to have had a BAC level of 0.10 or higher.

Jail inmates drinking at the time of the offense	Percent of drinking inmates in estimated BAC levels		
	0.05 and higher	0.08 and higher	0.10 and higher
All	81%	72%	67%
Violent	81%	75%	71%
Murder	90	86	86
Sexual assault	91	83	83
Robbery	86	85	80
Assault	78	69	65
Property	88%	82%	76%
Burglary	91	83	78
Larceny	91	87	82
Motor vehicle theft	88	81	69
Drugs	66%	55%	51%
Public-order	83%	72%	67%
DWI	84	73	68

Figure 33

- Across the periodic BJS surveys of jail inmates, the percentage reporting alcohol use prior to the offense suggests that violent offenders serving time in 1996 were somewhat less likely to have been using alcohol when they committed the crime than in earlier surveys.

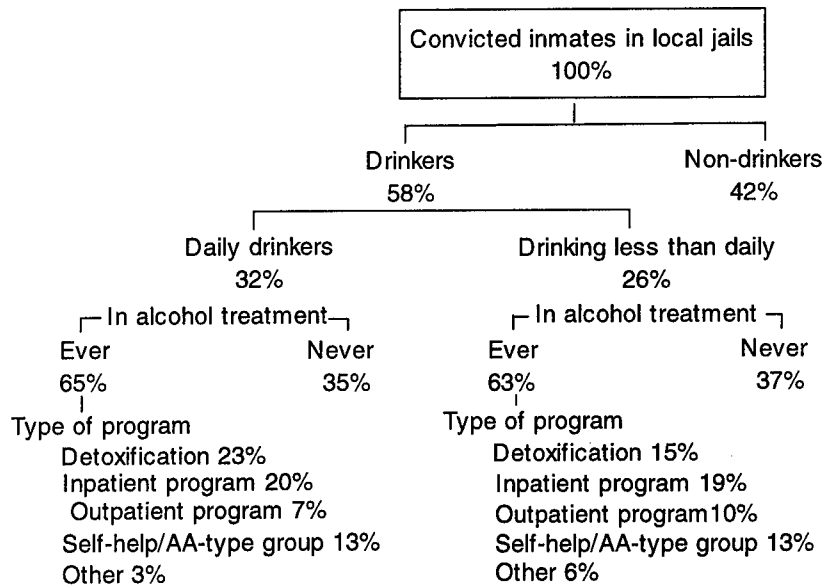
- Based upon the self-reported drinking behavior at the time of the offense, about two-thirds of convicted jail inmates who had been drinking had a BAC of at least 0.10 g/dl at the time of the offense and nearly three-quarters had BAC's of 0.08 or higher (figure 33).

	Percent of convicted jail inmates consuming alcohol prior to the offense		
	1983	1989	1996
All offenders	48%	41%	40%
Violent	54	47	41
Property	40	31	33
Drugs	29	20	29
Public-order	64	64	56

Sources: BJS, Surveys of Inmates in Local Jails.

About 6 in 10 convicted jail inmates said that they had been drinking on a regular basis during the year before the offense for which they were serving time.

Nearly 2 out of 3 of these inmates, regardless of whether they drank daily or less often, reported having previously been in a treatment program for an alcohol dependency problem.



Source: BJS, Survey of Inmates in Local Jails, 1996.

Figure 34

- About a third of all convicted inmates in local jails described themselves as having been daily drinkers at the time of the offense (figure 32). Among these daily drinkers, about 2 out of 3 said that they had previously received some form of alcohol treatment, with detoxification the most commonly described intervention. Among those who described themselves as drinking less often, about 2 out of 3 also reported prior alcohol treatment participation, most often in an inpatient program.

- The most recent census of the 3,300 local jails nationwide (1993) indicates that about 10% of all jails maintain special housing units for alcohol detoxification. Less than 4% of local jails in States in the Northeast, however, describe having such units available for housing inmates in need of alcohol detoxification.

Region	Number of jails, 1993	
	Total	With detox facilities
Total U.S.	3,304	324
Northeast	228	8
Midwest	967	82
South	1,591	170
West	518	64

Inmates in State prisons and alcohol use

- The alcohol consumption patterns of State prisoners differ markedly from jail inmates and probationers; though the prevalence of drinking is lower, the estimated levels of intoxication at the time of the offense are higher. A major departure from other components of the corrections population is that women inmates report higher levels of intoxication at the time of the offense than male inmates (figure 33).
- Overall, State prison inmates report having consumed an average of nearly 9 ounces of ethanol prior to the offense, the equivalent of about three six-packs of beer or two quarts of wine. The median time spent drinking prior to the crime was about 6 hours.
- Intoxication levels vary by the amount of time the offender spent

drinking before the crime but vary little by the relationship between the victim and offender in violent crimes.

- The extent of alcohol involvement in crime increases if victim use of alcohol at the time of the offense is included. While the NCVS does not ask crime victims to indicate if they had been drinking when the offense occurred, the inmate surveys ask the offender to indicate if he/she knew if the victim had been drinking. Among violent offenders in State prisons, 28% reported that they had been using alcohol at the time of the offense, 6% report only the victim had been using alcohol, and 8% of violent offenders report that both they and their victim had been drinking (text table on page 29). Manslaughter offenses and offenses directed against a spouse or intimate were the most likely to have been alcohol-involved.

Estimated average BAC at the time of the offense



Figure 35

According to offenders, whether the victim was drinking at the time of the violent offense:

	Of-fender	Vic-tim	Both	Nei-ther
All offenders	28%	6%	8%	58%
Offense				
Murder	25%	10%	13%	52%
Man-slaughter	27	13	17	43
Rape/sexual assault	27	3	8	62
Robbery	29	4	3	64
Assault	29	8	11	52

Victim/offender relationship

Stranger	30%	5%	7%	58%
Family	23	3	4	70
Spouse/intimate	27	10	18	45
Acquaintance	26	8	12	54

• Among State prisoners, nearly 3 in 10 described themselves as daily drinkers during the period preceding their incarceration (figure 34). By type of offense, there was little variation in the percentage who described themselves as drinking daily: only those serving time for drug offenses were less likely to report regular drinking or drinking daily. Daily drinkers reported that they began regular drinking earlier, at less than age 17, and at the time of the offense, they were estimated to have had the highest average BAC, about 0.30 g/dl.

Just under 30% of State prisoners described themselves as daily drinkers. Daily drinkers began regular drinking at the earliest age and had the highest estimated BAC at the time of the offense for which they were in prison.

Most serious offense of State prison inmates	Percent of State prison inmates				Drinking less than weekly
	Total	Non-drinkers	Daily drinkers	Weekly drinkers	
All	100%	28%	29%	25%	18%
Violent	100	26	30	25	18
Murder	100	24	32	25	19
Manslaughter	100	25	25	33	18
Sexual assault	100	25	29	25	20
Robbery	100	31	29	24	15
Assault	100	23	34	27	17
Property	100%	28%	30%	25%	16%
Drugs	100%	34%	23%	25%	19%
Public-order	100%	24%	32%	27%	17%
Average age began drinking regularly	17.4 yr		16.7 yr	18.0 yr	18.4 yr
Average BAC at the time of the offense	0.27		0.30	0.24	0.22

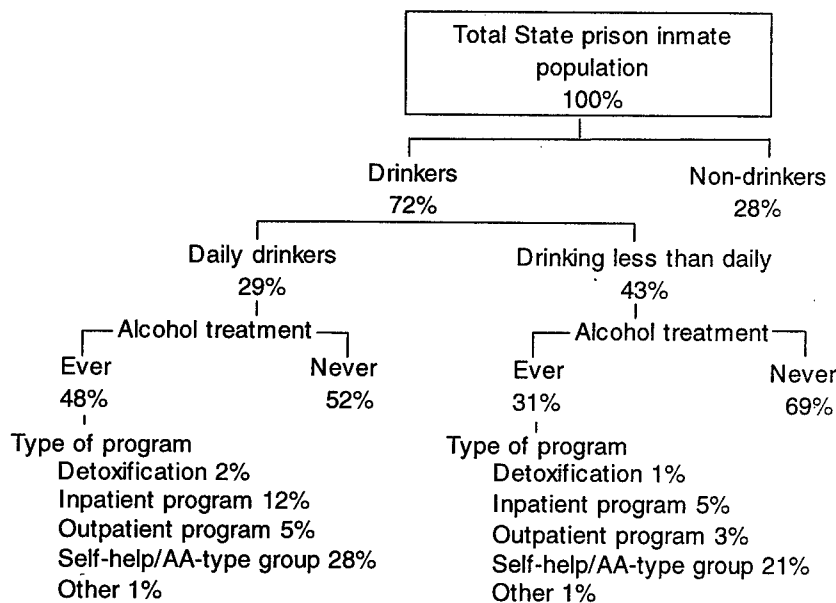
Figure 36

Convicted murderers in State prisons reported that alcohol was a factor in about half the murders they committed. Those who murdered intimates reported drinking the largest quantity for the longest period prior to the offense. They were estimated to have had a comparatively high BAC, about 0.30, at the time of the murder.

Drinking at the time of the murder	Victims of murderers in State prisons				
	All	Stranger	Family member	Intimate	Acquaintance
Total	100%	100%	100%	100%	100%
Murderer	25	26	14	27	24
Victim	10	8	9	9	13
Both	14	13	13	18	13
Neither	52	53	64	46	50
Average BAC of murderer	0.28	0.30	0.24	0.30	0.25

Figure 37

About half of all State prison inmates describing themselves as daily drinkers had received some form of treatment in the past. For most the treatment was in the form of participation in a self-help group such as Alcoholics Anonymous (AA).



Source: BJS, Survey of Inmates in State Correctional Facilities, 1991.

Figure 38

-
- About half the prisoners who described themselves as daily drinkers prior to entering prison, reported that they had participated in an alcohol treatment program at some time in their lives (figure 36).
 - Among offenders in State prisons who described themselves as drinkers, offenders convicted of public-order crimes were the most likely to report having previously participated in an alcohol treatment program.
 - About a third of daily drinkers in State prisons had participated in alcohol treatment programs 2 or more times previously. Since admission to prison, about 1 in 5 offenders who described themselves as drinkers joined an AA or Al-Anon type of group.
 - In 1995 a BJS census conducted among prisons nationwide revealed that 1,224 of the 1,375 State correctional facilities (both confinement facilities and community-based facilities) and 121 of the 125 Federal prisons and halfway houses provided alcohol dependency treatment programs. Among these 1,345 correctional facilities with alcohol treatment services, 1,075 were traditional confinement facilities and 270 were community-based primarily serving a pre-release population.
 - Among the 1,196 confinement facilities nationwide in 1995, 192 indicated that a central mission of the facility was to provide drug/alcohol treatment, more than double the number of prisons providing such services in 1990. Thirty-nine prisons described their primary function as alcohol/drug treatment.
 - In 1995 there were 110 privately operated correctional facilities in the U.S. under contract to State or Federal authorities. Among these, 4 facilities, housing an average daily population of 1,035 inmates, described their primary function as alcohol or drug treatment.

Appendix I

Formula for calculating BAC

The National Highway Traffic Administration has provided a formula that permits an estimate of Blood Alcohol Concentration (BAC) to be made based upon the self-reported drinking behavior of the offender immediately preceding the commission of the offense. The formula requires the collection of data from offenders about the type of beverage consumed, the alcohol content of that beverage, the quantity consumed, the amount of time spent drinking, the drinker's gender, and the body weight of the offender.

The formula for calculating BAC after multiple hours of drinking (Widmark Formula) is:

$$\text{BAC}(h) = [A / (r * p) / 10] - (h * k)$$

where

BAC=Blood Alcohol Concentration at time h

A=grams of ethanol consumed: which is equal to (liquid ounces of ethanol * .82)/.035

r=reduced body mass: which is .68 for males and .55 for females

p=weight in kilograms: which is equal to weight in pounds/2.2046

h=hours drinking

K=estimated rate at which the body metabolizes ethanol which is .015 grams per hour

Based on this formula, a male offender who weighs 173 pounds and reported consuming 12 beers in 4 hours before the offense would have an estimated BAC of 0.19 at the time of the crime.

To solve for BAC —

1) 144 ounces beer * 4% alcohol

content=5.76 ounces of liquid ethanol

2) $A = (5.76 * .82) / .035 = 134.95$ grams of ethanol

3) $p = 173 \text{ pounds} / 2.2046 = 78.47$ kilograms

4) $r * p = .68 * 78.47 \text{ kilograms} = 53.36$ kilograms

5) $h * k = 4 \text{ hours} * .015 = .06$

$$\begin{aligned} \text{BAC (4 hours)} &= [(134.95 / 53.36) / 10] - .06 \\ &= (2.527 / 10) - .06 \\ &= .19 \end{aligned}$$

Hours drinking at the rate of 2 beers per hour	Estimated BAC from consuming two 12-ounce beers per hour	
	173-pound male	136-pound female
1 hour	0.03	0.05
2	0.06	0.11
3	0.09	0.16
4	0.12	0.22

Note: The average metabolic rates assume a reduction of 0.015 g/dl per hour.

Appendix II

Liquor law violations on college campuses

Based upon a nationwide survey of postsecondary institutions carried out by the National Center for Education Statistics, in 1994 an estimated 13% of 2- and 4-year colleges reported on-campus arrests for liquor law violations. Liquor law violations generally include prohibited manufacture, sale, or possession of liquor and maintaining illegal drinking places but exclude public drunkenness offenses and DUI/DWI.

An estimated 63% of public 4-year universities reported arrests for liquor law violations compared to 17% of private 4-year schools. National estimates of the number of arrests on campus for 1994 were 20,430. Per capita arrest rates averaged 1.404 per thousand students nationwide but varied substantially by type of school, residency, size, and location:

Source: Laurie Lewis and Elizabeth Farris, *Campus Crime and Security at Postsecondary Education Institutions*, Washington, D.C.: National Center for Education Statistics, January 1997 (NCES 97-402).

Just over half of campus law enforcement agencies at 4-year universities and colleges with at least 2,500 students report that they operate alcohol education programs. Generally, the larger the university the more likely they are to maintain alcohol education as a special unit or activity. Public universities (59%) more often reported the availability of such programs and services than those universities which were privately operated (43%).

Source: Brian A. Reaves and Andrew L. Goldberg, *Campus Law Enforcement Agencies, 1995*, Washington, D.C.: Bureau of Justice Statistics, December 1996 (NCJ-161137).

Rates of arrest for liquor law violations per 1,000 students, 1994

Public 2-year	.339	No campus housing	.087
Private 2-year	.932	<25% on campus	1.575
Public 4-year	2.837	25% or more on campus	2.996
Private 4-year	.595		
<200 students	.985	Large city campus	.775
200-999	.336	Mid-size city campus	1.754
1,000-2,999	.939	Urban fringe campus	1.044
3,000-9,999	1.175	Town/rural campus	2.403
10,000 or more	1.780		

**Datapoints
for the
graphics**

**Cover. Number of persons under correctional supervision
who committed their crime after drinking, 1996**

	Number of convicted offenders who had used alcohol or drugs at the time of the offense	
	Alcohol	Drugs
Total	1,919,251	1,099,393
Probationers	1,268,965	445,251
Jail inmates	84,979	77,449
Prison inmates	358,827	351,186
Parolees*	206,480	225,507

*Estimated from the characteristics of inmates leaving State prison.

**Figure 2. Victims' perception of the
use of alcohol and drugs by the
violent offender**

Was the offender using —	Percent of victims of violence
Alcohol only	19.7%
Alcohol and drugs	4.7
Alcohol or drugs	1.3
Drugs only	5.1
Neither	38.7
Don't know	30.4

**Figure 9. Percent of violent incidents
that involved alcohol, by the victim-
offender relationship**

	Percent of violent incidents involv- ing alcohol
Spouses/ex-spouses	29.4%
Acquaintances	28.6
Boy/girlfriends	19.2
Strangers	11.8
Other family members	11.0

**Figure 12. Type of weapon used
in alcohol-related incidents**

	Percent of alcohol- related violent incidents
Hands, feet, or fists	79.1%
Firearms	3.7
Knives	6.9
Blunt objects	6.4
Other weapons	3.9

**Figure 11. Percent of violent incidents
involving alcohol, by hour of
occurrence**

Hour of occurrence	Percent of violent incidents
Midnight	9.3%
1 a.m.	9.6
2	7.8
3	4.8
4	2.6
5	1.4
6	1.0
7	0.9
8	0.8
9	0.7
10	0.9
11	1.0
Noon	1.3
1 p.m.	1.4
2	1.7
3	2.2
4	3.2
5	3.5
6	4.8
7	5.8
8	7.1
9	8.5
10	9.6
11	10.2
Midnight	9.3

Figure 18. Percent of fatal accidents with a drinking driver, by day of occurrence

	Percent of fatal accidents with a drinking driver
Monday	8.7%
Tuesday	8.5
Wednesday	9.4
Thursday	11.0
Friday	16.2
Saturday	25.6
Sunday	20.4

Figure 20. Percent of drinking drivers in fatal accidents, by BAC levels

BAC levels	Percent of drinking drivers
0.05 or less	11.7%
.06-.07	4.8
.08-.09	6.0
.10-.19	39.9
.20-.29	29.9
.30 or higher	7.6

Figure 23. BAC levels of drinking drivers in fatal accidents, by driving record

	BAC levels of drinking drivers in fatal accidents
DWI convictions	
2 or more	0.21
1	0.19
None	0.16
License suspensions	
2 or more	0.18
1	0.17
None	0.16
License	
Valid	0.16
Invalid	0.18
All drinking drivers	0.16

Figure 19. Percent of drinking drivers in fatal accidents, by BAC levels and hour of occurrence

	Percent of drinking drivers in fatal accidents with recorded BAC levels	
	0.08 or higher	0.10 or higher
Midnight-12:59 a.m.	62.9%	57.4%
1 -1:59	74.1	69.3
2 -4:59	72.3	67.4
5-6:59	33.3	30.7
7-9:59	12.7	11.7
10 a.m.-1:59 p.m.	14.9	13.7
2 -4:29	23.4	21.7
4:30 -6:29	36.0	33.5
6:30 -8:59	50.7	47.3
9 -10:59	57.9	54.2
11 -11:59 p.m.	63.7	59.3

Figure 26. Percent of offenders and victims who reported that the offender was drinking at the time of the crime

Source	Percent of incidents or offenders in which the violent offender was drinking
State prisoners	37.5%
Probationers	40.7
Jail inmates	40.6
Victims	35.1

Figures 28a, b, c. Alcoholic beverages consumed by convicted offenders drinking at the time of their offense, by jail and prison inmates and adults on probation

Beverage consumed at the time of the crime	Percent of drinking offenders		
	Adults on probation	Local jail inmates	State prison inmates
Beer	20%	20%	13%
Liquor	6	4	9
Beer and liquor	10	12	10
Other combinations	2	4	6
None	62	60	62

Figure 30. Percent of adults on probation who had used alcohol at the time of their offense, by offense and sex of offender

	Percent of adults on probation drinking at the time of the offense	
	Men	Women
Total	41%	25%
Violent	38	28
Property	21	6
Drugs	17	12
Public-order	75	62

Figure 32. Percent of inmates in local jails who had used alcohol at the time of their offense, by offense and sex of offender

	Percent of inmates in local jails drinking at the time of the offense	
	Men	Women
Total	41%	29%
Violent	41	35
Property	35	16
Drugs	29	27
Public-order	57	47

Figure 35. BAC levels of drinking State inmates at the time of their offense, by sex of inmates, number of hours of drinking, and victim-offender relationship

	Estimated BAC levels of State prison inmates at time of offense
Male	0.27
Female	0.37
Drinking 1 hour	0.13
2	0.20
3	0.27
4	0.34
Strangers	0.29
Family members	0.31
Intimates	0.29
Acquaintances	0.27

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